5

1/537191

PCT/GR2003/000054

THE PROTECTIVE LAPTOP-BRIEFCAS

The invention refers to a laptop-briefcase, containing plates, springs and flexible case in the interior so that the laptop is fitted correctly and remains safely in place.

Other bags used to transport laptops have a lining made of foamed material and other stuff. In case the bag is strongly hit, there is danger regarding the safety of the laptop.

The advantage of this invention are the plates and springs inside the bag, which absorb 10 the energy and vibration generated by a strong hit, reducing the risk of the laptop being damaged.

In order to achieve better safety, it is advisable to use different sizes of plates, springs and material, in order to create a first and second stage of energy absorption.

15 In the interior case, the vertical and horizontal sides are jointed with pliable texture, so that the size of the case can be reduced and increased depending on the size of the laptop and the portable remains in place.

20 The following design of the protective laptop - briefcase with springs is recommended. Figure (1) illustrates the opened bag, which meets all the requirements.

The bag consists of the exterior sides made of hard inflexible material, of the interior flexible case, of the springs (3 - 4 - 5), of the plates (2) placed in the interior of the 25 bag, of the interior lining made of pliable texture (7) and of the meshes (1) formed by the plates (2).

The bag is separated in two parts. The bottom part, covering 2 / 3 of the bag's height, consists of the base and the sides that form an integral part.

30 The top part (cover) covers 1 / 3 of the bag's height.

Figure 1 illustrates the sections of the interior with the metallic meshes (1), the plates (2), the small springs (3) which are incorporated to the plates (2), the springs (4) placed between the interior meshes and the exterior sides of the bag and the springs 35 (5), which are installed only in the vertical interior sides, so that the case is flexible. Figure 2 illustrates the common plan of the two parts of the bag: the bottom part

(without the sides) that forms the base, as well as the top part (cover), since both parts have the same springs layout (3 - 4) and plates layout (2) and function.

The laptop is placed on the created mesh (1). This mesh (1) is placed in the middle of 5 the bottom part of the bag. The respective mesh (1) is installed in the interior of the bag's top part.

Mesh (1) consists of eight plates (2).

Each edge of the plate (2) incorporates a spring (3), which is adjacent to the exterior 10 sides of the bag.

The springs (3) are helpful, since they provide the mesh with full elasticity and so the energy generated by vibration is absorbed.

In five parts of the mesh (1) are placed plates respectively (4). Four of these are 15 situated, where three plates (2) intersect and the fifth is placed in the center of the mesh, where four plates intersect (2).

Figure 3 illustrates a horizontal cut of the closed bag. Springs (4) between the mesh (1) and the bottom part (6) are clearly shown. Springs (4) are used for the 20 absorption of the energy created by vibrations.

Figure 4 illustrates a vertical cut of the opened bag. A crosswise connection of the plates (2) creates a mesh (1). Between the exterior side of the bag and the cut point of the plates (2), the spring (4) is situated.

25 In the space left on the right and the left side created by the crosswise plates (2), are placed the springs (5).

The springs (5) connect the exterior side of the bag with the interior side of the case.

This is how the case size is reduced and increased and that is the reason why the

30 springs stick out from the mesh (1) created by the crosswise connection of the plates

(2).

The lining (7) is made of pliable texture so that the size of the interior case is reduced and increased easier.